ABSTRACT OF THE DISCLOSURE

A spheroidal cast iron, particularly for piston rings for pistons of engines, with a particular alloyed chemical composition and subjected to a heat treatment known as austempering, which comprises an austenitization treatment followed by an isothermal hardening treatment, has mechanical characteristics that are comparable with those of the steel currently used to produce piston rings, while maintening the best tribological and self-lubrification characteristics of spheroidal cast irons, and a process suitable to obtain said spheroidal cast iron.